IV. MOUNTAIN FACILITIES

.1 Goals and Objectives

A ski area master plan involves planning the removal or replacement of existing equipment, integrated with the addition of new facilities over time. Modern mountain resorts require the most efficient and user friendly lift and trail systems possible, with a good balance of terrain type and variety. The Mountain Master Plan will be constructed over an extended period of time, therefore, it is necessary to have a complete understanding of the total project at buildout and in each separate phase, so that facilities can be balanced and capital invested effectively.

Objectives

The objectives of the Sun Valley mountain development plan are as follows:

- Optimize the utilization and operational efficiency of the existing physical plant
- Balance lift and trail capacities wherever possible
- Provide maximum capacity for minimum capital and operating costs
- Provide base staging facilities in balance with mountain access and capacity requirements
- Continue to increase the quality of the facilities to meet the ever-increasing expectations of the destination skier market
- Provide facilities and capacity that will compliment the proposed River Run development
- Increase the quality of the beginner facilities and terrain
- Each phase of development should provide an optimally balanced facility while at the same time, move towards the ultimate goal
- Define goals and projects to guide management and inform public agencies during the ensuing 10-year period

The following sections propose the installation of new equipment, the upgrading of existing equipment and removal of old and inefficient equipment. Sun Valley must be prepared to invest capital to improve facilities and increase capacity to maintain and increase skier visits.

.2 Bald Mountain - Re-Development of the Existing Ski Area

Warm Springs/Challenger Zone

Existing Situation

This zone is located on the north face of the mountain, stretching from the Warm Springs base area to the mountain top. Terrain on this face is currently serviced by the Greyhawk detachable quad chair (on the lower mountain), the Challenger detachable quad chair (top to bottom) and the Flying Squirrel double chair (on the mid-elevations). The Challenger quad chair services all of the trails on the north face of Bald Mountain, while the other two chairs only service a few of these trails on the lower or mid-mountain sections. The Challenger chairlift has a vertical rise of 3,152 feet and a rated capacity of 1,500 pph. The Challenger lift had the highest utilization of any lift on the mountain over the 3 years analysed, partly because of the quality of the terrain and also because the rated capacity is relatively low when compared to other detachable quad chairs on Bald Mountain. The Challenger lift is the primary staging route for skiers emanating from the Warm Springs base, which is surrounded by relatively dense accommodation development. An alternative staging route from Warm Springs would be via Greyhawk and Flying Squirrel when the weather is bad or the lines are too long on the Challenger.

For several years, Sun Valley staff have been exploring the possibility of constructing a new trail on Guyer Ridge, on this north slope near the western edge of the permit boundary. A trail on this terrain would create an additional top-to-bottom route serviced by the Challenger lift.

The Flying Squirrel lift is currently only operated on peak days and on bad weather days when the mountain top lifts cannot operate.

The Frenchman's detachable quad chair services high quality terrain in the low intermediate to advanced skill classes, however use of this lift has been limited in the past due to less than ideal snow conditions. Snowmaking has been installed over most of the Sun Valley ski area due to frequent marginal natural snow conditions. The snowmaking system was also installed on the Frenchman's ski trails, however this system has not been operated due to the lack of necessary approvals from the USFS. The lack of snowmaking on Frenchman's has resulted in a very low utilization of this lift.

Recommendations

It is recommended that the Guyer Ridge trail be constructed according to the preliminary engineering concept prepared for the Sun Valley Company by Mr. Beat VonAlman of Alpentech. This new trail will have a total length in excess of 6,000 feet with steep pitches, which puts it into a Class 6 (Advanced) skill category. This trail will have more variations in gradient and direction than either Limelight or Warm Springs Face, creating an entirely different character than either of those other trails. A by-product of this new trail construction is that it will also add more capacity to the pod serviced by the Challenger lift. The Sun Valley Company has proposed that this new trail be constructed in the near future.

As part of the Guyer Ridge permitting process, the permit boundary must be adjusted to encompass the entire ski trail. Currently, most of the proposed Guyer Ridge trail and a small part of the existing Upper Cozy trail are located outside the existing permit boundary.

The Flying Squirrel lift is an old technology, fixed grip chairlift which experiences one of the lowest utilization rates at the resort. This would normally lead us to recommend the removal of this lift, however, it is planned to retain this lift, as it is extremely valuable for skiing when bad weather limits operation of the lifts on top of the mountain, or diminishes the skiing experience at the top. Additionally, the combination of the Greyhawk and Flying Squirrel lifts allows skiers from Warm Spring to be transported to Lower College so that they can ski back to the River Run base when weather prevents the upper mountain lifts from operating. In its current configuration, this lift will be relatively economical to maintain for use on those few days of the season.

Ultimately, it is also recommended to replace the Challenger quad chair with a higher capacity four-passenger or six-passenger chairlift, when the existing chairlift equipment reaches the end of its useful life. The installation of a chairlift with a summer gondola option in this alignment will not only open up the potential for foot-passengers to comfortably access the mountain top but also allow for an increase in the rated capacity of this lift. This mixed chairlift/gondola type of lift is currently being used at Winter Park, Colorado and Big Mountain, Montana. These two areas operate the lifts for skiers in the chairlift configuration and then use the gondola option to transport foot passengers up to the mountain top restaurant during the summer or at night during the winters. This lift replacement is proposed for the final phase of development, when the decision is made to replace the Challenger chairlift equipment rather than maintain it.

It is recommended that approval be obtained so that the snowmaking on the Frenchman's ski trails can be operated. This will ensure high quality snow coverage in this zone, on par with the snow conditions on the rest of the mountain. Machine made snow on the Frenchman's trails will ensure that this zone of the resort receives a higher level of use, consistent with other lifts of this type on Bald Mountain. Additionally, the Frenchman's zone has ski trails in the intermediate and high intermediate skill levels, which significantly improves the overall skill level balance on Bald Mountain.

Mountain Access from River Run

Existing Situation

Currently, approximately 60 percent of Sun Valley's skiers use the River Run base to access the ski area, which could be as many as 4,000 skiers per day. This level of skier staging would tie up the uphill capacity of the River Run lift for about 1.7 hours and for approximately 2.3 hours on the Lookout lift. We anticipate that with development of the River Run Village, the number of skiers going through this portal will continue to increase and in general, the focus on this area will also increase. Currently, access to the upper mountain for pedestrians and beginner/novice skiers is less than ideal, with two separate detachable chairlift rides to get to the top of Bald Mountain, or one detachable chairlift and one fixed grip chairlift to get to the Roundhouse (and Gun Tower Lane to access Seattle Ridge).

Once novice skiers graduate from the River Run lift and trail or Dollar Mountain, they are ready for the Seattle Ridge terrain, but may not have skills that are strong enough for the Lookout or Exhibition zones. In the present situation, skiers accessing Seattle Ridge must either ski down from the top of Lookout peak or use the Exhibition fixed grip chair (not always operated due to its old technology and unpopularity) to access the Roundhouse area and then ski Gun Tower Lane to the Seattle Ridge lift. When returning to the base areas at the end of the day, skiers are required to ski down the more difficult trails from the top of the Cold Springs lift to the River Run base.

The analysis undertaken in the Inventory Section of this report indicated that the Christmas lift services a large amount of terrain and with an hourly capacity of 2,400 passengers per hour, is currently underlifted.

Recommendations

It is recommended to install a gondola, stretching from River Run to the Round House area. This lift would provide easy access, and downloading for skiers and foot-passengers between the Round House and River Run. This type of lift (an enclosed gondola) provides easy and convenient loading for foot-passengers who would be able to access the mountain for sightseeing or dining either during the day or in the evening, both winter and summer.

This gondola would be installed in the first phase if development. The gondola basically replaces the Exhibition chairlift (which can then be removed) and stretches from the River Run base to the Roundhouse restaurant. This lift will not only provide direct access to the Roundhouse, but will also make it much easier for novice and low intermediate skiers to make their way to Seattle Ridge. These skiers will be able to ride the gondola directly to the Roundhouse and then ski down the gentle Gun Tower Lane skiway to access the Seattle Ridge chairlift. When skiers are finished skiing in this zone, they can ski down the very gentle Lower Broadway trail to the Cold Springs lift and ride up to the Roundhouse. Once they arrive at the Roundhouse, they can slide 300 feet to the gondola station and download back to River Run. This allows the beginner skiers to return to the River Run base without having to ski on the steeper terrain below the Roundhouse. This lower section of the gondola between River Run and the Roundhouse would also allow foot-passengers to access the historic Roundhouse year round. Evening dining, weddings and special events could be held at this venue.

The Christmas quad chair would be replaced with either another detachable quad chair or even a detachable six-passenger chair depending on the technology available the time of the last phase of development. At 2,800 pph, this lift will have a slightly higher rated capacity than the existing chair and, in conjunction with the lower lift, have an important role as a staging lift. The existing Lookout restaurant should be upgraded and expanded to accommodate increased traffic from the Challenger and Christmas chairlifts. Additionally, this mountain top location will be ideal for evening dining, sightseeing, weddings, nature interpretive lectures, etc if the summer gondola option on the Challenger lift is exercised.

Southern Bowl (Mayday/Seattle Ridge/Cold Springs)

Existing Situation

Currently, there are three lifts located in the Southern Bowl zone; the Seattle Ridge detachable quadruple chairlift (installed in 1992), the Mayday fixed grip triple chairlift (installed in 1976) and the Cold Springs double chairlift (installed in 1970). The Seattle Ridge chair services some of the most gentle ski terrain at Sun Valley, primarily in the low intermediate and intermediate skill classes. This lift has the highest lift ridership of any lift at Sun Valley and one of the highest utilization rates, due to the high quality intermediate terrain served in this area. As mentioned in the previous section, access and egress to this lift is less than ideal with the existing lift system.

The Mayday lift services skiing in the Mayday Bowl on mostly un-treed, east facing terrain. This terrain is primarily in the advanced skill class, with two routes (Broadway Face and Sigi's Bowl, at the southern edge) suitable for skiers in the

intermediate skill class. Even though this lift is an old technology fixed grip chairlift, it is quite well utilized and is especially popular on powder days. Part of the Broadway Face ski trail is currently located outside the permit area.

The Cold Springs double chairlift's primary function is to pull Seattle Ridge and Mayday skiers out of the bottom of the Southern Bowl. The lift is very old (1970) and has a rated capacity of 1,200 pph, which may be inadequate to provide egress in an acceptable time period on very busy days in the Southern Bowl.

The Seattle Ridge restaurant provides food service and other skier services to guests skiing in these zones.

Recommendations

The Seattle Ridge detachable quad chair will remain in its current configuration to continue to provide excellent lift service to some of the most popular skiing on the mountain. In order to increase the variety of intermediate terrain available at Sun Valley, a new ski trail will be constructed between Broadway and Christin's Silver, covering approximately 6.1 acres.

Both the Mayday and Cold Springs lifts are old, fixed grip lifts with limited capacity and will be due for replacement in the next few years. In order to increase the quality of service in this zone, it is proposed that the Mayday lift be replaced by a detachable quad chair on the same alignment as the existing lift. The terminals, however, may be located in slightly different locations than the existing lift to provide the best loading and unloading with the new terminal design.

It is also recommended that the permit boundary be adjusted to bring the entirety of the historically skied area on Broadway Face into the permit area. This permit boundary adjustment has a total area of 17 acres.

The Cold Springs chair should also be replaced with a new detachable quad, but in a slightly different alignment. The bottom station will be in the same general location as the existing lift but the top terminal will be moved up onto the hill approximately 150 feet to the east. This new, higher position will allow for easier access to the Roundhouse and all the surrounding ski trails for offloading skiers. From this point, skiers of any skill class can also easily slide down to the Exhibition gondola for downloading. The higher capacity of this new lift will also be necessary to provide egress for the increased number of skiers in this Southern Bowl area due to the increased capacity of the Mayday lift and the installation of Lift 17 at the southern edge of Seattle Ridge.

The Lookout Transport lift would be retained to provide a link between the lookout Restaurant and the top of Mayday Lift

Bad Weather Skiing

Existing Situation

There are several days during each ski season when the uppermost lifts are unable to operate because the weather is so extreme that skiers will not ski on the mountain top. During these periods, Sun Valley would still like to provide the best skiing possible by opening as much of the mountain as possible. Generally, on these days, trails on the mid-mountain are in adequate condition for skiing and all the mid-mountain lifts are operated, including those which are not normally operated (Sunnyside and Flying Squirrel). Sunnyside and Flying Squirrel lifts, in conjunction with the River Run and Greyhawk lifts also provide important lift/ski access between the Warm Springs and River Run bases. On these days, Frenchman's, Exhibition, River Run and Greyhawk are also operated for skiing.

Recommendations

In general, we would normally recommend the removal of the Sunnyside and Flying Squirrel lifts due to their age, lack of use, old technology (fixed grips) and the fact that trails serviced by these lifts are also serviced by other lifts. However, due to their importance as bad weather lifts, they should remain in their current configuration and operational mode. In addition to the previously mentioned lifts, the Frenchman's quad and the new Exhibition gondola will also be used in most bad weather conditions.

.3 Bald Mountain - Expansion of the Existing Ski Area

Pod G

Existing Situation

During analysis of the terrain inside and surrounding the currently developed ski area, we identified a 97-acre pod of terrain suitable for skiing on the southeastern side of the ski area that was identified in previous Master Plans. Pod G is a mostly north facing pod located south of the Olympic Ridge and east of the Roundhouse, containing terrain suitable for skiers in the low intermediate to advanced skill classes. This pod of skiing falls within the current permit boundary and was identified for ski trail development in previous Master Plans. This pod was identified in the Terrain Capacity Analysis to have a potential capacity of approximately 580 skiers per day. Pod G is located at the mid-elevations and would be skiable in most weather conditions.

Recommendations

It is recommended to provide lift service in Terrain Pod G in the form of a detachable quadruple chairlift. This lift would have a generally east-west alignment with its bottom station in the valley bottom at the 6,540-foot elevation and the top station located at the top of the local peak (at the 7,490-foot elevation). This lift would have a rated capacity of 2,000 pph, a vertical rise of 950 feet and service seven ski trails covering approximately 44.7 acres. It is recommended that these ski trails be provided with snowmaking to ensure that snow conditions are adequate to attract skiers to this new development. A terrain park would be located on the terrain within this area on trails 6B and 6A. In addition, snowmaking should be provided not only on the access and egress trails but also on several of the main ski trails serviced by this lift. Access to this new skiing can be made via the Roundhouse zone (via a selection of ski trails and lifts) and egress from this pod should be made towards the Olympic Ridge from the top of the lift.

South Seattle Ridge/Turkey Bowl

Existing Situation

The Terrain Capacity Analysis section of this report identified a sizeable pod of novice/low intermediate terrain on the southeast side of Seattle Ridge. Pod M covers a total of 126 acres which are capable of accommodating approximately 560 skiers per day. This pod was the only pod on the entire mountain that was assigned a primary skill class in either Skill Class 2 (Novice) or 3 (Low Intermediate), which makes it extremely valuable to help provide a more balanced ski area and relieve the crowding on the River Run trail. This pod is located at a high elevation, which would provide better snow conditions but also be more susceptible to inclement weather. Pod M is located at the top of Seattle Ridge, which is rather remote from the base areas.

Recommendations

It is proposed to install another detachable quad chair in Pod M on the southeast side of Seattle Ridge. This lift would service 483 vertical feet, rising from the 8,220-foot elevation, up to the peak of Seattle Ridge, approximately 300 feet south of the Seattle Ridge top terminal. Two novice trails are proposed to be developed on the southeast facing ridge, stretching a total length of almost 3,000 feet. These trails should be provided with snowmaking to ensure good skiing conditions during every part of every ski season. Novices would access this area by lift to the Roundhouse, skiing Gun Tower Lane and then riding Seattle Ridge. Egress from Lift 17 could be made by several different routes. If the skier is not very skilled, they could download on the Seattle Ridge chairlift, ski to the Cold Springs chair, ride Cold Springs to the

Roundhouse and then download on the gondola to River Run Base. Better skiers could ski trails in the low intermediate skill class on a re-configured Olympic Lane ski trail rather than downloading. Most of this new pod of skiing is located outside of the current permit area, therefore the permit area should be expanded to accommodate this part of the ski area expansion.

Summary

Table IV.1 lists the Skier Carrying Capacity of the final Phase (Phase 3) of the Bald Mountain Master Plan at 11,740 skiers per day, an increase of approximately 2,540 skiers per day above the existing Bald Mountain Skier Carrying Capacity of 9,200 skiers. Table IV.2 lists a summary of the acreages and skill classes of the trails present at completion of the Master Plan. Ski trails under this plan will cover a total of 1,126 acres, with a total trail capacity of approximately 10,390 skiers per day. Figures 15a through 15c illustrate the Bald Mountain phased development proposed under the Mountain Master Plan. The Phase 3 Bald Mountain Master Plan view from River Run is illustrated in a 3 dimensional perspective in Figure 15d and from Warm Springs in Figure 15e. The Technical Supplement lists the detailed lift and trail capacity calculations for each phase of development.

TABLE IV.1
BALD MOUNTAIN MASTER PLAN
PHASE 3
LIFT SPECIFICATIONS AND CAPACITIES

Lift No.	Lift Name	Lift Type	Hourly Capacity	Vertical Feet	VTF/Hr (000)	VTF Demand	Loading Effic.	Access Reduc.	SCC
1	River Run	D4C	2,400	614	1,474	8,340	95%	12%	420
2R	River Run Gondola	D8G	2,800	1933	5,412	15,793	95%	24%	900
3R	Christmas	D4C	2,800	1363	3,816	21,607	95%	20%	910
4R	Cold Springs	D4C	2,800	1090	3,052	19,986	95%	50%	470
5	Lookout Express	D4C	1,800	2674	4,813	19,247	95%	15%	1,370
6	Sunnyside	3C	1,500	1840	2,760	14,000	85%	100%	0
7	Greyhawk	D4C	2,400	1488	3,571	20,382	95%	0%	1,170
8	Frenchman's	D4C	1,800	1502	2,704	15,894	95%	0%	1,050
9	Flying Squirrel	2C	1,200	1,611	1,933	14,000	90%	100%	0
9	Flying Squirrel	2C	1,200	1611	1,933	14,000	90%	100%	0
10R	Challenger	D4C	2,000	3152	6,304	18,835	95%	25%	1,620
12	Seattle Ridge	D4C	2,400	1303	3,127	13,884	95%	4%	1,280
13	Kinderspielplatz	HT	300	10	3	500	80%	0%	30
14R	Mayday Express	D4C	2,400	1613	3,871	19,343	95%	3%	1,190
16		D4C	2,000	950	1,900	17,360	95%	0%	700
17	Turkey Bowl	D4C	2,000	483	966	8,340	90%	0%	630
Total - Bald Mountain			**32,400**		**45,939**				**11,740**

TABLE IV.2
BALD MOUNTAIN
TRAIL AREAS AND CAPACITIES

Skill Classification	Acres	Skiers
1 Beginner	0.4	20
2 Novice	29.5	590
3 Low Intermediate	114.2	1,830
4 Intermediate	186.3	2,810
5 High Intermediate	82.1	980
6 Advanced	633.0	3,520
7 Expert	81.1	640
TOTALS	**1,126.4**	**10,390**

.4 Dollar Mountain - Re-Development of the Existing Ski Area

Existing Situation

The Dollar Mountain ski facility is known as the learning zone at Sun Valley Resort, and its primarily low end terrain complements Bald Mountain's mostly high end terrain very well. While the Bald Mountain ski facility has undergone massive renovations during the past 10-15 years, the Dollar Mountain skiing facility has remained essentially the same, with four fixed grip chairlifts, moving carpets and very limited snowmaking capabilities (using portable equipment from Bald Mountain and other equipment rented from local farmers). The Sun Valley Company decided to start focusing more effort on improving Dollar Mountain and the skier's experience there and began by replacing the daylodge during the summer of 2004.

Recommendations

The Master Plan for Dollar Mountain envisions the replacement or relocation of every lift in order to improve the guest experience by increasing comfort and convenience, optimizing the skier circulation and providing exclusive areas for the beginner skill classes.

The Half Dollar lift (Lift D1) is proposed to be replaced by a detachable quad chair on the same alignment as the existing double chairlift. The bottom terminal will be located slightly farther south than the existing terminal to make slightly more room in the base area for pedestrian and skier circulation. This lift will have a load elevation close to that of the ground floor of the new daylodge. The top terminal will be located in approximately the same position as the existing lift.

The Dollar lift (Lift D2) will also be replaced by a new detachable quad chairlift. Like the existing lift, this lift will stretch from the base area to the mountain top, servicing the central and southern trails. The top terminal will be located close to the

existing lift's position (to be determined exactly during detailed design of the lift) but the bottom terminal will be moved about 50 feet west to create more space around the daylodge for circulation and to create more space on the eastern edge for a dedicated beginner zone that is easily accessible from the daylodge. It is proposed that the top station will have a 90-degree offload in order to use the limited space much better.

The Quarter Dollar lift (Lift D3) will also be replaced by a new lift suitable for beginner skiers. Many alternatives were examined for the position and type of lift suitable for this general location and use, with the preferred configuration shown in Figure 16a. The new detachable quad chair will be installed on a slightly different alignment than the existing lift, with the bottom terminal on grade with the new daylodge. The top terminal is located slightly lower and moved farther east onto the Quarter Dollar trail, where the terrain is more suitable for beginners. There will be less conflict between this lift's users and the Dollar lift's users. This will eliminate the steep "ski-off" currently in place on the existing Quarter Dollar double chairlift and also eliminate the conflict of skiers from the upper slopes mixing with the offloading beginners. Skiing on this lift will occur primarily on the east side of the lift, while Dollar lift skiers will ski primarily on the west side of this lift. This lift will be installed with a rated capacity of approximately 1,200 pph (less than half the maximum possible) so that the trail will not be overloaded when the lift is running full and also so that the chair interval will be long enough (12 seconds) for beginners to easily load on this lift. Due to the short length of this lift, it may also be preferable to run the lift at a slower speed (600 feet per minute) to make loading even easier and lengthen the lift ride time (to 1.7 minutes) and resting time for these beginners.

Typical 90 degree off load station

It is also proposed to install a moving carpet conveyor lift at the east edge of the base area directly adjacent to the new daylodge, to cater to those children and "never-ever" skiers and snowboarders using Dollar Mountain. This lift will be located next to the valley trail and on grade with the new daylodge. The slope serviced by this lift may have to be fenced off in order to eliminate the possibility of skier conflicts with skiers coming from above.

As part of the Dollar Mountain Master Plan, a tubing area serviced by a moving carpet lift was installed during the summer of 2004 at the easternmost edge of the resort, just below the top of the new Quarter Dollar lift. This tubing zone is accessible either by walking about 1,100 feet from the new Dollar Mountain Daylodge up the valley trail or by riding the Quarter Dollar lift to the top of the tubing area.

The Sun Valley Lodge River Run gondola will also have two intermediate stations located at Dollar Mountain. The primary purpose of the lower station is to provide access to Dollar Mountain, while the Hidden Valley station's main purpose is to provide return skiing on a proposed terrain park in Hidden Valley. Skiers using this terrain park would use the Dollar-Hidden Valley section of the gondola to provide lift access to this zone. The terrain park would have a daily capacity of approximately 140 skiers per day, which could easily be exceeded by the lift, with a capacity of 2,800 pph, therefore, for SCC calculations, we will assume a balanced pod (SCC =140 skiers/day).

Summary

Figures 16a through 16d illustrate the phased development proposed under the Mountain Master Plan. Table IV.3 lists the calculated SCC of the Dollar Mountain Master Plan at 2,310 skiers per day, an increase of approximately 830 skiers per day above the existing SCC, but primarily a very significant increase in the quality of the skier experience. Table IV.4 lists the trails present at completion of the Master Plan. Ski trails under this plan will cover a total of 84.9 acres with a total trail capacity of approximately 1,530 skiers per day. The Technical Supplement lists the detailed lift and trail capacity calculations for each phase of the Dollar Mountain Development.

TABLE IV.3
DOLLAR MOUNTAIN
LIFT SPECIFICATIONS AND CAPACITIES

Lift No.	Lift Name	Lift Type	Hourly Capacity	Vertical Feet	VTF/Hr (000)	VTF Demand	Loading Effic.	Access Reduc.	SCC
D1	Half Dollar	D4C	2,000	176	352	5,252	90%	10%	380
D2	Dollar	D4C	2,000	631	1,262	10,539	95%	11%	710
D3	Quarter Dollar	D4C	1,000	134	134	3,090	90%	0%	270
D4	Elkhorn	D4C	1,800	554	997	8,805	95%	0%	750
	Moving Carpet	MC	400	22	9	700	70%	0%	60
	Hidden Valley Gondola (Terrain Park)								140
Total - Dollar Mountain			**7,200**		**2,754**				**2,310**

TABLE IV.4
DOLLAR MOUNTAIN
TRAIL AREAS AND CAPACITIES

Skill Classification	Acres	Skiers
1 Beginner	12.8	270
2 Novice	17.6	350
3 Low Intermediate	33.9	560
4 Intermediate	13.5	260
5 High Intermediate	7.2	90
6 Advanced	0.0	0
7 Expert	0.0	0
TOTALS	**84.9**	**1,530**

.5 Summary of Proposed Snowmaking Coverage

History has shown that the ski slopes at Sun Valley require snowmaking in order to operate consistently. The Bald Mountain ski facility has one of the largest and most technologically advanced automatic snowmaking systems, which has ensured optimal snow conditions during the last 14 years. The Dollar Mountain ski area currently has no formal snowmaking system but can make limited snow using borrowed and rented equipment.

Bald Mountain

As shown in the Master Plan, it is proposed that all the new ski trails be supplied with snowmaking, as well as a portion of the terrain serviced by the Frenchman's lift. Figure 18 illustrates the coverage possible by the existing snowmaking system, as well as the coverage proposed under this Master Plan. Current coverage totals approximately 371 acres and the new snowmaking would cover approximately 191 acres, for a total of 562 acres. As listed later in this description, the mountain development will be separated into 3 distinct phases and the snowmaking development will also fall into these same 3 phases.

A summary of the snowmaking coverage is listed in Table IV.5, while the detailed snowmaking trail coverage and lift capacities are listed in the Technical Supplement and illustrated in Figure 18.

TABLE IV.5
BALD MOUNTAIN
SUMMARY OF SNOWMAKING COVERAGE BY PHASE

	Phase 1		Phase 2		Phase 3	
Skill Classification	**Acres**	**Skiers**	**Acres**	**Skiers**	**Acres**	**Skiers**
1 Beginner	0.4	20	0.4	20	0.4	20
2 Novice	14.7	290	33.8	670	33.8	670
3 Low Intermediate	108.1	1,740	109.5	1,760	120.1	1,930
4 Intermediate	143.7	2,310	143.7	2,310	146.8	2,360
5 High Intermediate	57.1	690	57.1	690	67.9	820
6 Advanced	178.1	1,060	178.1	1,060	193.3	1,160
7 Expert	0.0	0	0.0	0	0.0	0
TOTALS	**502.1**	**6,110**	**522.6**	**6,510**	**562.3**	**6,960**

Dollar Mountain

The Sun Valley Company will evaluate their snowmaking needs for the Dollar Mountain facility and install snowmaking as required. However, it is recommended that snowmaking be installed on critical trails so that the Dollar Mountain ski facility can be operated during periods of low snowfall. It is recommended that the Quarter Dollar trail, including the tubing hill and the beginner carpet lift, have snowmaking coverage. The Half Dollar lift should have snowmaking coverage on Half Dollar Bowl and Graduation. The Dollar lift should have coverage on Sepp's Bowl and Dollar Face. Finally, the Elkhorn lift should have snowmaking coverage on Elkhorn Bowl and Joint Venture. During low snow periods, snowmaking on these selected trails will allow each lift to operate and also allow skier circulation within the Dollar Mountain zone.

.6 Terrain/Snowboarding Parks & Adventure Park

Terrain parks are an exciting and relatively new addition to ski areas. Terrain parks and halfpipes facilitate a unique aspect of snowboarding and skiing. While snowboarders use most terrain in a way familiar to alpine skiers, freestyle snowboarding originates straight from the street. The terrain park and halfpipe is where skateboarding's influence can be either confined or showcased, depending upon your point of view. Popular with both skiers and snowboarders, terrain parks are an excellent way to utilize a relatively small area of terrain. Halfpipes are also a very important terrain feature associated with snowboarding.

Ski areas, with the assistance of the local snowboarders and "freestyle" skiers, should set out to create a facility that will satisfy the needs and desires of the end users and also create interest in the sport to attract new participants. In choosing a site, many factors should be considered including lift access, conflicts with skiing, suitable terrain and gradients, etc. Additionally, the planning team should develop a list of proposed features and develop the conceptual design of these features. A terrain park will likely be more successful if potential users are involved in the concept, design and execution of the park. The park should be run by people who intimately understand the needs and culture of the users.

Another very important recent development is the construction of "teaching" terrain parks. Many ski areas only construct one terrain park, in which they construct the biggest, most difficult features in order to compete with other resorts in a marketing sense. The cost of constructing and maintaining these large features is quite high. Over the years, it has become apparent that the large terrain features alienate the majority of the skiing public because of the " intimidation" factor due to the difficulty of properly riding the features, the "air time" required of many features and the "youth culture" promoted. Teaching terrain parks are essentially smaller copies of the "signature" terrain park that many ski areas operate, in order to allow less skilled users to try out the features and grow proficient before entering the big terrain park. These terrain parks have features that are each 1/3 to 2/3 the size of the large parks which is less intimidating and the consequences of falling are much smaller. These terrain parks do not have the marketing power or prestige for the operator of the larger parks but they are often much busier than the large "signature" parks. Most importantly, these parks can add variety and enjoyment to the average skier's experience.

Bald Mountain currently has one halfpipe located adjacent to the Lower Warm Springs run, but has no terrain park. Dollar Mountain currently has no terrain park or halfpipe. Ecosign recommends that the Sun Valley Company construct more terrain park style facilities to provide some variety for their current customers and to attract and retain more guests.

As described previously, one of the most important considerations in the selection of a site for a terrain park is the natural slope gradient. An ideal location for a terrain park should have gradients in the 15-35% range (depending on the skill of the user), while halfpipes need slope gradients in the 25-35% range. Easy access from the lift is also of prime importance and visibility from the lift can also be an important factor for some resorts.

Bald Mountain

Based on the terrain gradients needed, the majority of ideal terrain on Bald Mountain that isn't already used heavily, or is too valuable for other reasons is very

limited. The lower portion of Greyhawk, Broadway, College and Ridge seem to have gradients in the proper range, but Broadway and College are very heavily used as collector and distribution trails and the suitable section of Ridge is actually quite short.

A formal snowboard terrain park will be located on the lower portion of the Greyhawk ski trail. In order to accomplish this, the ski trail will require some widening and terrain modification. This terrain feature is proposed for Phase 1 of the Master Plan. Another location also proposed for a terrain park in Phase 1, is the Janss Pass ski trail in Frenchman's. This terrain park would extend from the middle of Flying Squirrel down to the intersection with Under Graduate.

In Phase 2, a terrain park would be built on the two Lift 17 ski trails. Another snowboard terrain park has also been identified on the Cold Springs Cut-off (Trail 4B) from Gun Tower Lane down to the 7,200-foot elevation.

In Phase 3, the slopes below and to the east of the Roundhouse would be suitable for a halfpipe or competition quality superpipe and terrain park. The terrain park would extend from approximately the 7,500-foot elevation on the Roundhouse Hill down Trail 16A to the 7,200-foot elevation where 16B intersects 16A. Another snowboard terrain park has been identified on the Cold Springs Cut-off (Trail 4B) from Gun Tower Lane down to the 7,200-foot elevation.

Dollar Mountain

Dollar Mountain, being a more gently sloped mountain than Bald Mountain, has more terrain which is suited for terrain parks and halfpipes. Ecosign and the Sun Valley Company have identified a high profile location for an FIS suitable halfpipe adjacent to the Half Dollar lift on Graduation. Due to the fact that Bald Mountain has little opportunity for terrain park development, it is proposed that both a teaching terrain park and a larger terrain park (if needed) be constructed at Dollar Mountain. As shown in Figures 16a through 16e, the teaching terrain park would be constructed on the Half Dollar Bowl trail and the larger terrain park could be constructed in the bowl on the west side of the ski area (Hidden Valley) where the natural topography is suitable for a steeper, larger terrain park.

.7 Skier Staging Routes and Capacities

The efficient staging of skiers is a complex operation which requires sufficient facilities both on and off the mountain to allow visitors to park, buy tickets, rent equipment and other necessities, dine and subsequently be distributed throughout the mountain's lift and piste systems. Skier staging to the ski area is somewhat analogous to pipelines (lifts) pumping (skiers) up the mountain to fill reservoirs (lift and trail systems). The amount of time it takes for all skiers to access the upper mountain is a

critical parameter, as skiers will generally choose to ski at a different resort if the lift queues (including morning lift queues) are too long. The industry accepted staging time for a pure access lift is a maximum of 2.5 hours for an average level of service.

Lifts that also service return skiing (like some of those at Bald Mountain) should have a much lower staging period (1-1.5 hours) so that some seats (up to 50%) are free for skiers return skiing of the trails serviced by that lift.

Bald Mountain

Currently, there are two staging portals at Bald Mountain, River Run and Warm Springs. River Run currently contains one staging route to the upper mountain (Lift 1 and Lift 5) with a capacity of 1,800 pph (limited by the Lookout Lift). The River Run base will also gain a second route to the upper mountain (at 2,800 pph) when the River Run Gondola/Christmas route is constructed. As shown in Table IV.6, the current staging capacity, using the above assumptions will be approximately 8,788 skiers in the future.

Skiers using the Warm Springs base currently have one route to the mountain top on most days and two routes on peak days (when Flying Squirrel is open and can be used in conjunction with Greyhawk). The primary route, the Challenger quad chair, has a capacity of 1,500 pph and can comfortably stage 1,781 skiers based on a 2.5-hour staging period (and 50% reduction due to return skiing demand on this lift). When the Challenger lift is replaced by a 2,800 pph gondola, the lift can comfortably stage 3,325 skiers. The current capacity of the Challenger quad and the River Run quad is 3,900 pph, resulting in a 2.5-hour staging capacity of 9,260 skiers if used 100% for staging. The summary of the staging capacities for Bald Mountain is listed in Table IV.6.

TABLE IV.6
BALD MOUNTAIN
LIFT STAGING CAPACITIES

		Rated Capacity	Effective Capacity	2.5 Hr. Staging Capacity	Subtotal
Warm Springs	**Challenger**	2,800	1,330	3,325	3,325
River Run	**River Run-Lookout**	1,800	855	2,138	
	River Run Gondola	2,800	2,660	6,650	8,788
Bald Mountain Total		7,400	4,845		12,113

Note: Effective Capacity is Rated Capacity multiplied by Loading Efficiency and also reduced by 50% for return cycle skiing on Challenger & River Run-Lookout

Dollar Mountain

At Dollar Mountain, currently all of the lifts emanate from the base area and as such, no staging lift is needed once skiers arrive at the base area.

.8 Skier Service Programming

Base area land use includes access roads, parking lots, base lodges and the lower terminals of the ski lifts. Since the function, convenience, character and aesthetics of the base facilities all contribute to the visitor experience, the base area plays a critical role in the success of a resort. Base areas require a distinct spatial organization to effectively move visitors from the parking lots, through the skier staging area, onto the ski slopes and up the hill. This spatial organization is centered in and around the base lodges and resort center with adjacent plazas and circulation corridors. The general base area hierarchy is as follows:

a. **Entry/Arrival** - The visitor should be given a definite sense of arrival with a minimum of decision points and limited pedestrian/vehicular conflict.

b. **Staging Facilities** - Generally required by most visitors, these services include ticket sales, restrooms and information. These services can be located in the base area core, as well as in a distinct "multi-purpose" daylodge.

c. **Commercial Facilities** - Required by most, but not all visitors, the secondary services include retail outlets, ski rental and repair, ski school, daycare facilities, public lockers and food and beverage facilities. Again, most of these services can be located within the daylodge.

d. **Skier Congregation** - Includes provision of adequate space for the placement of, and circulation around ski racks, information kiosks and equipment donning areas.

e. **Base Area Ski Lift Terminals** - Skiers should be able to see and move easily to the lower terminals of the ski lifts. Ideally, there should be a two percent grade sloping down to the lift terminals from the skier congregation plazas.

f. **Operational/Service Facilities** - Operational and service functions include delivery, storage and waste disposal areas, ski patrol and first aid facilities, area administration and employee locker rooms.

g. **Skier Service Floorspace Overview** - The overview describes the categories and inter-relationships between the various skier services.

ENTRY/ARRIVAL ZONE

The entry/arrival zone acts as the reception area of the ski area for guests arriving by bus, or visitors who may require information services such as reservations for lodging or directions to their rental unit. It has been our experience that drop-offs and short-term parking constitutes between five and twenty percent of all arriving visitors, depending on the nature and size of the resort. Day visitors will proceed directly to the parking lots and carry their equipment to the skier congregation area.

STAGING FACILITIES

Staging facilities are those which are required by almost all visitors arriving to or staying at the area and hence, must be easily accessible with generous space allowances.

Tickets

Since almost all lift tickets are purchased before noon, a southeast orientation maximizes solar exposure and hence, improves guest comfort. Line-ups for lift tickets must be arranged so that distinct lines of up to 25 people can be formed. Ticket areas should have temporary ski and snowboard racks nearby to allow sliders to easily set their equipment aside while purchasing tickets. As patrons approach the ticket windows, shelves are needed for guests to place goggles, gloves and hats while reaching for their wallet or credit cards. Rates should be posted for every two windows for easy reading to speed up the exchange. Many areas find it useful to heat the area overhead the last two or three spaces in line where, during inclement weather, bare hands must be used to complete the ticket purchase.

Space must be allowed for clientele to move away from the ticket windows and attractive but apparent trash receptacles should be placed adjacent to the equipment racks. Purchase of the lift ticket is a ski area's single most important contact with its clientele. The experience should be pleasant but not unduly memorable.

Restrooms

Public restrooms are required by both day skiers and area visitors. Restrooms are frequently relegated to basement areas which are easily accessible from the arrival plaza, as well as the food and beverage services. Quite frequently, restrooms will have both indoor and outdoor entrances to minimize congestion within the resort center.

Information

Information services are generally handled at an information wicket adjacent to the ticket windows or, alternatively, at a counter space which doubles as the reception for the area's administrative offices. This service disseminates information pertaining to everything from weather conditions to special ski programs and events. The information center should be staffed by polite and knowledgeable personnel.

COMMERCIAL FACILITIES

The secondary services are those which bring substantial revenues to the area but are not required by all clientele. As such, these services take a secondary place to the primary services, but must still be easily accessible from the primary pedestrian plaza and circulation area.

Retail Ski Shop

Retail shops for day skiers and snowboarders generally experience high volumes of business on accessories such as film, goggles, ski poles, gloves, hats, etc. The retail shops should have windows and a covered entrance directly accessible from the primary skier plazas, since frontage space is directly related to sales.

Ski/Snowboard and Sport Equipment Rental/Repair

Ski and snowboard rental and repair shops are also very high volume businesses which must outfit large numbers of guests with full equipment packages within a two-hour period. Ideally, the ski area rental shops will have an entry corridor where clientele fill out forms and examine the rate sheets then move into an equipment fitting area which exits directly onto the skier congregation area. During the afternoon periods, the morning exit becomes the afternoon entrance as renters return equipment and pick up their identification and deposits.

Ski/Snowboard School

The ski school office or desk also requires access to the primary skier plazas for the purpose of maximizing use of the ski/snowboard school. Sometimes the ski school is located inside the ski shop, while other schools run from a counter in the daylodge.

Daycare/Children's Ski School

A daycare and children's ski school center is essential at ski resort areas. Experience has shown that well run, professionally staffed daycare centers can provide significant revenues to an area, while encouraging increasing participation in skiing by families. The daycare center is situated slightly away from the main activity areas, with direct access to a small, fenced snowplay or handle tow area. The nursery/daycare building should provide special food preparation and toilet facilities, as well as room for general play, crafts and nap periods.

Public Lockers

Recent ski industry experience suggests that public lockers provide good service and a potential profit center. Many areas are going towards a "country club" atmosphere with full size lockers where visitors leave their equipment throughout the week and change into ski gear upon arriving at the area. This set-up ensures a loyal clientele. Public lockers and change areas are best situated adjacent to the washrooms and can be secured separately after hours.

Food & Beverage Services

Food and beverage services are utilized throughout the day. Where possible, these facilities should have views of the mountain slopes and good sun exposure. Outdoor space and sundecks can also provide additional seating at modest expense. The layout of the food service area is paramount to the economic success of the food service operation and most areas have gone to a "scramble" and modified "fast food" system to improve sales and customer efficiency. While most ski area cafeteria facilities serve beer and wine, the bar and lounge facilities are generally separated from the main cafeteria to afford sociability to distinct social and age groups.

SKIER/SNOWBOARDER CONGREGATION

The skier/snowboarder congregation area is ideally separated vertically from the entry and pedestrian plazas to discourage guests on skis from entering the vehicle zone. The skier congregation area has well manicured snow surfaces with equipment racks and is used to purchase tickets, put on ski equipment and enter the lift massing areas or, alternatively, to store equipment while using the lodge facilities.

OPERATIONAL FACILITIES

While there are no set rules for the spatial location of the area administration and other service functions, administration and staff lockers are frequently situated in the basement, or north facing sides of the buildings. The first aid and ski patrol requires direct access from the slopes to allow the patrol to bring in accident victims by toboggan. There must also be direct ambulance access to the first aid room from a vehicular terminus zone or parking lot. The first aid room should have approximately one bed for every 500 skiers for comforting accident victims while they are waiting for friends or further medical aid. Preferably, the first aid room should be situated in an area which is not highly visible to the majority of the area's clientele. A full resort also requires a complete medical facility for all guests.

Bald Mountain

Table IV.7 lists the skier service floor area required for each phase of development on Bald Mountain. Sun Valley has proposed to either upgrade or entirely replace the Lookout Restaurant with a food service and skier service lodge with between 25,000 to 30,000 square feet of floorspace. This lodge would be built during Phase 2 of the Master Plan. The remaining skier service floor area requirements would be built on private land at the Sun Valley Village or the River Run Village.

TABLE IV.7
BALD MOUNTAIN
SKIER SERVICE PROGRAMMING
MOUNTAIN MASTER PLAN

Guest Service Function			**Recommended Ecosign Standard**			
		Existing	**Recomm.**	**Phase 1**	**Phase 2**	**Phase 3**
Calculated Skier Carrying Capacity		9,200		9,460	10,470	11,740
Design Day		5,200		7,568	8,376	9,392
Staging Facilities	(ft^2/skier)	(ft^2)	(ft^2)	(ft^2)	(ft^2)	(ft^2)
Ticket Sales	0.15	1,155	780	1,135	1,256	1,409
Public Lockers & Change Rooms	1.20	6,346	6,240	9,082	10,051	11,270
Equipment Rental & Repair	1.00	3,481	5,200	7,568	8,376	9,392
Ski School / Guest Relations	0.50	907	2,600	3,784	4,188	4,696
Children's Programs (see note)	0.50	541	520	878	986	1,106
Staging Subtotal	**3.35**	**12,430**	**15,340**	**22,447**	**24,857**	**27,874**
Commercial Facilities (Square Feet)						
Food & Beverage Seating	4.00	30,067	20,800	30,272	33,504	37,568
Kitchen & Scramble	2.00	14,322	10,400	15,136	16,752	18,784
Restrooms	1.00	6,518	5,200	7,568	8,376	9,392
Accessory/Retail Sales	0.75	4,864	3,900	5,676	6,282	7,044
Commercial Subtotal	**7.75**	**55,771**	**40,300**	**58,652**	**64,914**	**72,788**
Operational Facilities (Square Feet)						
Administration	1.00	1,507	5,200	7,568	8,376	9,392
Employee Facilities	0.50	4,140	2,600	3,784	4,188	4,696
First Aid & Ski Patrol	0.35	3,114	1,820	2,649	2,932	3,287
Operations Subtotal	**1.85**	**8,761**	**9,620**	**14,001**	**15,496**	**17,375**
Building Subtotal	**12.95**	**76,962**	**65,260**	**95,100**	**105,267**	**118,037**
Storage/Mechanical	1.30	11,192	6,734	9,801	10,847	12,163
Circulation/Walls/Waste	1.94	14,313	10,101	14,701	16,270	18,244
Subtotal	**3.24**	**25,505**	**25,505**	**25,505**	**25,505**	**25,505**
Guest Service Total	**16.19**	**102,467**	**102,467**	**102,467**	**102,467**	**102,467**

No additional grooming maintenance facilities are proposed for Bald Mountain within this Master Plan.

Dollar Mountain

During the summer of 2004, Sun Valley Company constructed a new daylodge at Dollar Mountain. This new facility has a floor area of approximately 25,000 square feet. Table IV.8 lists the additional area that is required for each phase of development. Sun Valley Company will build skier service facilities on Dollar Mountain as dictated by market demand.

TABLE IV.8
DOLLAR MOUNTAIN
SKIER SERVICE PROGRAMMING
MOUNTAIN MASTER PLAN

Guest Service Function		**Recommended Ecosign Standard**							
	Existing	**Phase 1**		**Phase 2**		**Phase 3**		**Phase 4**	
Calculated SCC	1,480	1,520		1,850		1,950		2,310	
Design Day	1,184	1,216		1,480		1,560		1,848	
		Total	New	Total	New	Total	New	Total	New
Staging Facilities	(ft^2)	(ft^2)	(ft^2)	(ft^2)	(ft^2)	(ft^2)	(ft^2)	(ft^2)	(ft^2)
Ticket Sales	-	182	182	222	40	234	12	277	43
Public Lockers & Change Rooms	1,001	1,459	458	1,776	317	1,872	96	2,218	346
Equipment Rental & Repair	1,744	1,216	(528)	1,480	264	1,560	80	1,848	288
Ski School / Guest Relations	363	608	245	740	132	780	40	924	144
Children's Programs (see note)	1,559	3,514	1,955	3,942	429	4,381	438	4,496	115
Staging Subtotal	**4,667**	**6,979**	**2,313**	**8,160**	**1,181**	**8,827**	**666**	**9,763**	**936**
Commercial Facilities (Square Feet)									
Food & Beverage Seating	4,085	4,864	780	5,920	1,056	6,240	320	7,392	1,152
Kitchen & Scramble	2,612	2,432	(180)	2,960	528	3,120	160	3,696	576
Restrooms	1,950	1,216	(734)	1,480	264	1,560	80	1,848	288
Accessory/Retail Sales	-	912	912	1,110	198	1,170	60	1,386	216
Commercial Subtotal	**8,647**	**9,424**	**778**	**11,470**	**2,046**	**12,090**	**620**	**14,322**	**2,232**
Operational Facilities (Square Feet)									
Administration	408	1,216	808	1,480	264	1,560	80	1,848	288
Employee Facilities	897	608	(289)	740	132	780	40	924	144
First Aid & Ski Patrol	-	426	426	518	92	546	28	647	101
Operations Subtotal	**1,305**	**2,250**	**945**	**2,738**	**488**	**2,886**	**148**	**3,419**	**533**
Building Subtotal	**14,618**	**18,653**	**4,035**	**22,368**	**3,716**	**23,803**	**1,434**	**27,504**	**3,701**
Storage/Mechanical	3,403		403		372		143		370
Circulation/Walls/Waste	5,717		605		557		215		555
Subtotal	**9,120**		**1,009**		**929**		**359**		**925**
Guest Service Total	**23,738**		**5,044**		**4,645**		**1,793**		**4,626**

Note: Design Day is 80% of SCC except existing which is based on business levels
Children's Ski School is based on 80% of combined Bald & Dollar Design Day

.9 Mountain Development Summary

Bald Mountain Phasing

It is proposed that the development on Bald Mountain be divided into 3 distinct phases. The text below briefly describes the elements of each phase and lists a summary of the facilities present in each phase. Detailed specifications for the mountain facilities are listed in the Appendix titled "Technical Supplement".

Phase 1

The first phase of the Master Plan envisions improvement to the existing terrain in the form of snowmaking and the addition of new ski terrain on Guyer Ridge and Seattle Ridge. Lift improvements for Phase 1 include the removal of the Exhibition triple chairlift and its replacement with a gondola from the River Run Base to the Roundhouse. With the installation of the River Run Gondola, Phase 1 includes a more efficient utilization of the Roundhouse facility by extending the operating periods so that the restaurant can be operated on a year-round basis, including evening dining. Figure 15a illustrates the Phase 1 development on Bald Mountain.

1. Construct Guyer Ridge ski trail
2. Re-align and grade Olympic Lane
3. Construct new Seattle Ridge ski trail
4. Approval of snowmaking on Frenchman's terrain
5. Addition of snowmaking – Olympic Lane /Roundhouse Slope, Upper and Lower Broadway, Guyer Ridge, Upper Cosy, Upper Hemingway, Christmas Bowl and Brick's Island
6. Install River Run Gondola
7. Remove Exhibition
8. Remodel the Roundhouse and expand operating period
9. Adjust permit area to include currently skied Broadway Face and Guyer Ridge.
10. Terrain Park on lower Greyhawk

Phase 2

In Phase 2, the Mayday lift is replaced with a detachable quad chairlift. Figure 15b illustrates the Phase 2 development on Bald Mountain. This phase of development also includes the expansion of beginner terrain on Seattle Ridge/Turkey Bowl. This terrain would also have snowmaking coverage. As part of this terrain expansion, the Cold Springs lift is replaced with a detachable quad to facilitate easier egress for beginners and low intermediates and increase the egress capacity. Figure 15b illustrates the Phase 2 development on Bald Mountain.

1. Install Seattle Ridge/Turkey Bowl Beginner Detachable Quad Chairlift
2. Construct Seattle Ridge/Turkey Bowl Beginner Trails
3. Install Seattle Ridge/Turkey Bowl Snowmaking
4. Adjust permit area to include Seattle Ridge/Turkey Bowl Beginner Terrain
5. Replace Cold Springs with Detachable Quad Chairlift
6. Replace Mayday with Detachable Quad Chairlift
7. Upgrade and expand or replace Lookout Restaurant

Phase 3

The third and final phase of the Bald Mountain Master Plan development includes the replacement of the Christmas detachable quad chairlift with a gondola that is connected to the River Run gondola with a pass-through mid-station located adjacent to the Roundhouse. The Challenger detachable quad chairlift would also be replaced with a gondola. With gondola access to the top of Bald Mountain, the improvement and expansion of the Lookout Restaurant to a 25,000 to 30,000 square foot facility would take place. The final terrain development within the permit area would take place in Pod G, with the installation of a detachable quadruple chairlift and snowmaking. Figure 15c illustrates the Phase 3 development on Bald Mountain.

1. Replace Christmas detachable quad chairlift
2. Install detachable quadruple chairlift on Pod G
3. Construct Pod G ski trails
4. Develop Terrain Park on Pod G trails
5. Install snowmaking on Pod G
6. Replace Challenger

A summary of the three master Plan development phases is listed in Table IV.9.

TABLE IV.9
BALD MOUNTAIN
DEVELOPMENT SUMMARY

PHASE	LIFTS	NUMBER OF LIFTS	SCC	SKI TRAILS	SNOWMAKING	SKIER SERVICES
Existing	Lift 1 - River Run - D4C - 2400pph Lift 2 - Exhibition - 3C - 1500pph Lift 3 - Christmas - D4C - 2400pph Lift 4 - Cold Springs - 2C - 1200pph Lift 5 - Lookout - D4C - 1800pph Lift 6 - Sunnyside - 3C - 1500pph Lift 7 - Greyhawk - D4C - 2400pph Lift 8 - Frenchman's - D4C - 1800pph Lift 9 - Flying Squirrel - 2C - 1080pph Lift 10 - Challenger - D4C - 1500pph Lift 11 - Lookout - 3C - 1800pph Lift 12 - Seattle Ridge - D4C - 2400pph Lift 13 - Kinderspieplatz - HT - 300pph Lift 14 - Mayday - 3C - 1800pph	14	9,200	1,024 acres		
PHASE 1	**Install:** Lift 2R - River Run Gondola - D8G - 2800pph **Remove:** Lift 2 - Exhibition - 3C	14	9,460	1,062 acres **Add:** Guyer Ridge Olympic Lane Regrade New Seattle Ridge Trail Terrain Park Lower Greyhawk	Guyer Ridge Olympic Lane Regrade New Seattle Ridge Trail Upper and Lower Broadway Upper Cozy Upper Hemingway Christmas Bowl Brick's Island Frenchman's' Zone	Extend Roundhouse Operating Hours
PHASE 2	**Install:** Lift 14R - Mayday Express - D4C - 2400pph Lift 17 - Turkey Bowl - D4C - 2000pph Lift 4R - Cold Springs - D4C - 2800pph Sun Valley-River Run Access Gondola **Remove:** Lift 14 - Mayday - 3C Lift 4 - Cold Springs - 2C - 1200pph	15 + Access Gondola	10,470	1,082 acres **Add:** Turkey Bowl	Turkey Bowl	New Lookout Restaurant
PHASE 3	**Install:** Lift 3R - Christmas Gondola - D4C - 2800pph Lift 10R - Challenger - D4C - 2000 pph Lift 16 in Pod G - D4C - 2000 pph **Remove:** Lift 3 - Christmas - D4C - 2400pph	16 + Access Gondola	11,740	1,126 acres **Add:** Lift 16 Ski Trails	Lift 16 Ski Trails	

Dollar Mountain Phasing

It is proposed that the development on Dollar Mountain be divided into 4 distinct phases. The text below briefly describes the elements of each phase and lists a summary of the facilities proposed in each phase. Detailed specifications for the mountain facilities are listed in the Appendix titled “Technical Supplement”.

Phase 1

The first phase of the Dollar Mountain redevelopment commenced during the summer of 2004. This development included the replacement of the Dollar Mountain Cabin with the new Dollar Mountain Daylodge, formalizing the parking, regrading of the Quarter Dollar slope, installation of a 2 new beginner carpet lifts, and the installation of a tube lift and hill.

1. Replace Dollar Mountain Cabin with new state-of-the-art facility (completed)
2. Reconfigure parking lot (completed)
3. Install new beginner carpet (completed)
4. Replace Quarter Dollar chairlift with new detachable quad chairlift
5. Construct tubing hill (completed)
6. Install permanent snowmaking on the Quarter Dollar trail and tubing hill
7. Construct snowboard half pipe on Graduation

Phase 2

1. Replace Dollar Mountain lift with detachable quad chairlift
2. Install permanent snowmaking to the Sepp's Bowl and Face of Dollar
3. Move the bottom terminal off Half Dollar to facilitate the grading required to new Dollar chairlift

Phase 3

1. Replace Half Dollar mountain lift with detachable quad chairlift
2. Install permanent snowmaking to the Graduation and Half Dollar Bowl
3. Sun Valley to River Run Gondola with an angle-station on Telegraph Hill near the top of the Half Dollar Chairlift and an off load station at the top of Hidden Valley
4. Hidden Valley Terrain Park, serviced by the Dollar-Hidden Valley section of the gondola

Phase 4

1. Replace Elkhorn chairlift with a detachable quad chairlift
2. Install permanent snowmaking on Joint Venture and Elkhorn Bowl

A summary of the Dollar Mountain Master Plan phasing is listed in Table IV.10.

TABLE IV.10
DOLLAR MOUNTAIN
DEVLEOPMENT SUMMARY

PHASE	LIFTS	NUMBER OF LIFTS	SCC	TRAIL AREA	SNOWMAKING
Existing	Lift D1 - Half Dollar - 2C - 1000pph Lift D2 - Dollar - 2C - 1200pph Lift D3 - Quarter Dollar - 2C - 1200pph Lift D4 - Elkhorn - 3C - 1400pph Lift D5 - Accelerator - MC - 400pph	5	1,480	69.1 acres	
PHASE 1	Install: Lift D3 - Quarter Dollar - D4C - 1000pph Lift D5 - MC - 400pph Remove: Lift D3 - 2C - 1200pph Lift D5 - Accelerator - MC - 400pph	5	1,520	75.2 acres Tubing Hill Snowboard Half-pipe on Graduation	 Quarter Dollar Tubing Hill
PHASE 2	Install: Lift D2 - Dollar - D4C - 2000pph Remove: Lift D2 - 2C - 1200pph	5	1,850	77.9 acres Re-Grade Snow Apron at Dollar Base	Sepp's Bowl Dollar Face
PHASE 3	Install: Lift D1 - Half Dollar - D4C - 2000pph Sun Valley-River Run Access Gondola Remove: Lift D1 - 2C - 1000pph	5 + Access Gondola	1,950	84.9 acres Hidden Valley Terrain Park	Hidden Valley Terrain Park Graduation Half Dollar Bowl
PHASE 4	Install: Lift D4 - Elkhorn - D4C - 1800pph Remove: Lift D4 - 3C - 1400pph	5 + Access Gondola	2,310	84.9 acres	Joint Venture Elkhorn Bowl

.10 Sun Valley Lodge – River Run Gondola

Existing Situation

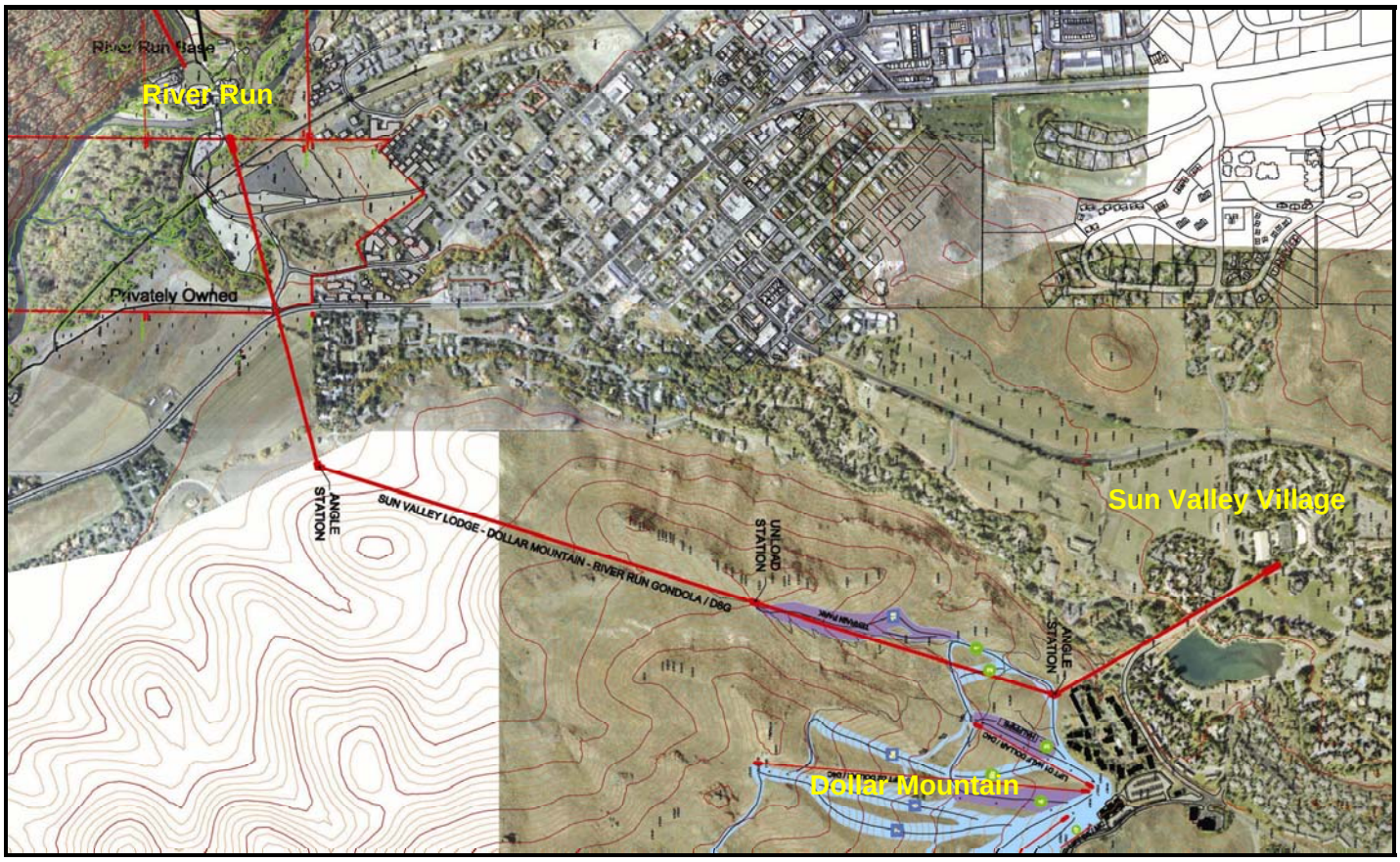
Currently, much of Sun Valley's business consists of destination skiers staying in and around the Sun Valley Lodge and the Village. The Lodge and Village are approximately 3/4 mile from the Dollar Mountain ski facility and between 2 miles (River Run) and 3+ miles (Warm Springs) from the Bald Mountain ski area. The Bald Mountain (River Run) and Dollar Mountain base areas are approximately 2 miles apart by road and 1.6 miles apart "as the crow flies".

Skiers staying at the Village currently access the ski areas by private vehicle (if they have one) or by the Sun Valley Company's shuttle bus. Although this extensive bus system has provided adequate service for many years, the Sun Valley Company would like to provide a very high quality experience for its guests by making access much more convenient.

Recommendations

Ecosign and Sun Valley management have examined the possibility of a lift connecting the two ski areas with the Sun Valley Village for many years now, in order to provide easy access and a higher quality service to Sun Valley's guests. After examining many possibilities, one potential gondola alignment has been proposed as the optimal alternative due to many physical and political factors.

The northern terminus of the connection lift is located in Sun Valley Village adjacent to the outdoor ice skating facility and the southern end will be at River Run Base with one or two intermediate stations. Figure 17 illustrates the approximate location of this preferred alignment, along with essential and potential intermediate stations.



Proposed Alignment for the Sun Valley Village to River Run Village Gondola

The gondola would run from the Sun Valley Village, along the edge of the Dollar Road right-of-way to Dollar Mountain near the top of the Half Dollar lift. This section of the gondola is 2,051 feet long and would have a ride time of approximately 2.1 minutes. At this point, there would be an angle-station that would allow skiers, snowboarders and foot-passengers to load and unload to utilize the Dollar Mountain facilities.

From the Dollar Mountain angle-station, the lift runs up Hidden Valley to the saddle at the top of Hidden Valley. It is proposed that a one-side, unload station be installed at this point (at the 6,300-foot elevation) to allow skiers to utilize the Hidden Valley terrain potentially as a terrain park. This section of the gondola has a length of 2,494 feet and a ride time of 2.5 minutes.

From the Hidden Valley unload station, the gondola would proceed down to a second angle-station at the 5,850-foot elevation. This angle-station redirects the gondola toward the River Run Base. This section of the gondola is 3,678 feet long and has a ride time of 3.7 minutes.

The final section of the gondola connects the angle-station with the River Run base area. This section is 2,721 feet long with a ride time of approximately 2.7 minutes. A portion of this lift between the angle-station and the River Run base crosses over the Reinheimer Conservancy.

The total ride time from the Sun Valley Lodge to the River Run Base is estimated to be approximately 14 minutes, which includes the transfer time within each of the angle-stations and the Hidden Valley offload station.

The specifications for each section of this gondola are listed below in Table IV.11.

TABLE IV.11
SUN VALLEY-RIVER RUN GONDOLA
LIFT SPECIFICATIONS

Lift Name **Lift Type**	**SV Resort-Dollar D8G**	**Dollar-Hidden Valley D8G**	**Hidden Valley-Angle D8G**	**Angle-River Run D8G**
Top Elevation ft.	5,990	6,300	6,300	5,850
Bottom Elevation ft.	5,930	5,990	5,850	5,760
Total Vertical ft.	60	310	450	90
Horizontal Distance ft.	2,050	2,475	3,650	2,720
Slope Distance ft.	2,051	2,494	3,678	2,721
Average Slope %	3%	13%	12%	3%
Rated Capacity pph	2,800	2,800	2,800	2,800
V.T.F./Hr.(000)	168	868	1,260	252
Operating Speed fpm	1,000	1,000	1,000	1,000
Ride Time (min.)	2.1	2.5	3.7	2.7

.11 Sun Valley Resort - Combined Capacities & Balances at Buildout

As mentioned in the Inventory section of this report, the Bald Mountain and Dollar Mountain facilities are complementary, as Dollar Mountain contains mostly lower skill class terrain and Bald Mountain has terrain that is weighted towards the higher skill classes. With the installation of the proposed resort gondola linking the Sun Valley Lodge with both ski areas, the physical relationship between the two ski areas becomes even closer, practically transforming the two ski areas into one ski area. This makes the analysis of these two ski areas as one resort even more applicable. As part of the analysis of the overall skiing facilities at the resort, we also analyzed the overall resort's capacities and balances.

As mentioned in the previous sections, the Bald and Dollar Mountain ski lifts are proposed to have a combined lift capacity of approximately 15,170 skiers per day and the trails will cover a total of 1,211 acres.

Table IV.12 and Plate IV.1 illustrate the distribution of the combined ski terrain by skill class for both ski facilities, as compared to the skier market. As shown, the overall balance is very good, with the only real imbalances being the shortage in high intermediate terrain and the excess of advanced terrain. This one imbalance is not quite as bad as shown, as many of the advanced trails are groomed, which brings them closer to the high intermediate skill class.

TABLE IV.12
SUN VALLEY
MOUNTAIN MASTER PLAN
CUMULATIVE SKI TRAIL BALANCE
BALD AND DOLLAR MOUNTAINS

Skill Classification	Acres	Skiers	Balance	Ideal
1 Beginner	13.3	290	2.4%	5%
2 Novice	47.0	940	7.9%	10%
3 Low Intermediate	148.1	2,390	20.1%	20%
4 Intermediate	199.7	3,070	25.8%	30%
5 High Intermediate	89.3	1,070	9.0%	20%
6 Advanced	633.0	3,520	29.5%	10%
7 Expert	81.1	640	5.4%	5%
TOTALS	1,211.3	11,920	100%	100%

Average Density =	12.5	Skiers/Acre
Optimum Density =	12.7	Skiers/Acre
Weighted Demand =	14,402	VTF/Skier/Day

SUN VALLEY
CUMULATIVE SKI TRAIL BALANCE
BALD AND DOLLAR MOUNTAINS

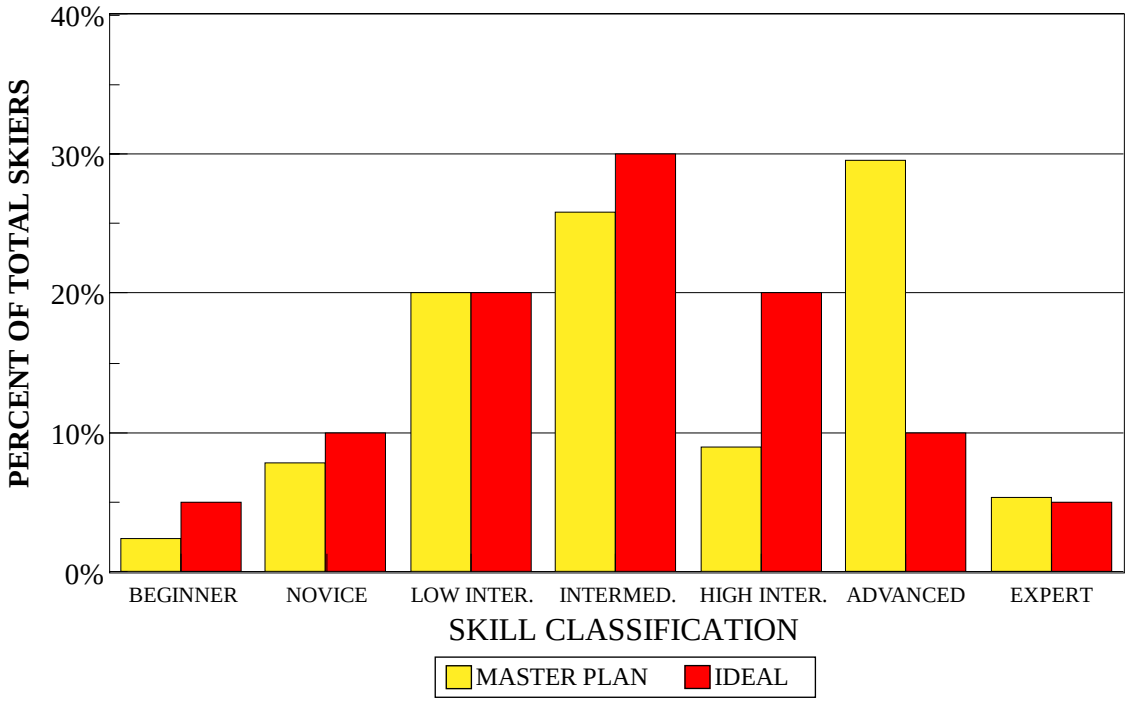


PLATE IV.1

.12 Bad Weather Mode

During periods of bad weather when the upper mountain lifts cannot be operated on Bald Mountain, Sun Valley utilizes the lower and mid-mountain lifts to provide skiing to the public, as well as maintain the lift/ski link between the Warm Springs and River Run bases. Under these conditions, skiers staging out of the River Run base utilizes the River Run detachable chairlift to access the Exhibition and Sunnyside lifts. From the Warm Springs side, skiers are able to stage up the Greyhawk lift to Flying Squirrel lift. Once skiers have reached the top of Flying Squirrel, they can access the Frenchman's terrain and detachable chairlift. In the final phase, Lift 16 will also be skiable in bad weather.

Under this operating mode, the Bald Mountain lifts can accommodate approximately 7,190 skiers per day, as listed in Table IV.13.

TABLE IV.13
BALD MOUNTAIN
BAD WEATHER MODE
LIFT CAPACITY CALCULATIONS

Lift Number	1	2R	4R	6	7	8	9	13	16	
Lift Name	River Run	River Run Gondola	Cold Springs	Sunnyside	Greyhawk	French-man's	Flying Squirrel	Kinder-spielplatz		
Lift Type	D4C	D8G	D4C	3C	D4C	D4C	2C	HT	D4C	TOTAL
Top Elevation ft.	6,368	7,687	7,706	8,200	7,374	8,089	8,174	5,760	7,490	
Bottom Elevation ft.	5,754	5,754	6,616	6,360	5,886	6,587	6,563	5,750	6,540	
Total Vertical ft.	614	1,933	1,090	1,840	1,488	1,502	1,611	10	950	11,038
Horizontal Distance ft.	2,906	6,000	2,625	4,794	3,875	3,783	3,716	150	3,260	
Slope Distance ft.	2,970	6,304	2,842	5,135	4,151	4,070	4,050	150	3,396	33,068
Average Slope %	21%	32%	42%	38%	38%	40%	43%	7%	29%	35%
Rated Capacity pph	2,400	2,800	2,800	1,500	2,400	1,800	1,200	300	2,000	17,200
V.T.F./Hr.(000)	1,474	5,412	3,052	2,760	3,571	2,704	1,933	3	1,900	22,809
Rope Speed fpm	900	1,000	1,000	465	900	900	500	200	1,000	
Trip Time Min.	3.3	6.3	2.8	11.0	4.6	4.5	8.1	0.8	3.4	
Operating Hr./Day	7.0	7.0	6.5	7.0	7.0	6.5	7.0	6.0	6.8	
V.T.F. Demand/Day	8,340	15,793	19,069	18,237	18,741	15,894	14,672	500	17,360	
Loading Eff. %	95%	95%	95%	85%	95%	95%	90%	80%	95%	
Access Reduction	8%	9%	60%	100%	9%	0%	17%	0%	0%	
SCC Skiers/Day	**420**	**900**	**400**	**0**	**1,150**	**1,050**	**690**	**30**	**700**	**5,340**

Table IV.14 lists the trails that would operate under bad weather mode and their specifications. Under this operating mode, the useable Bald Mountain trails cover approximately 461 acres and have a daily capacity of approximately 7,190 skiers, based on ideal densities.

ecosign
Mountain Resort Planners Ltd.

TABLE IV.14
BALD MOUNTAIN
BAD WEATHER MODE
AVAILABLE SKI TRAILS

Trail Name	Trail No.	Skill Class	Elevation Top Feet	Elevation Bottom Feet	Total Vert. Feet	Horz. Dist. Feet	Slope Dist. Feet	Percent Slope Avg.	Percent Slope Steep	Ave. Width Feet	Horz. Area Acres	Slope Area Acres	Skiers At Area Density	Skiers At Area Total
Lift 1 - River Run														
Lower River Run	1A	2	6,350	5,758	592	3,070	3,127	19%	27%	144	10.13	10.32	20	210
Total Lift 1	1						3,127					10.32		210
Lift 2 - Exhibition														
Olympic Lane/Ridge	2A	3	7,675	6,410	1,265	8,870	8,960	14%	38%	47	9.47	9.57	16	150
Olympic	2B	6	7,380	6,600	780	1,590	1,771	49%	59%	192	7.00	7.80	6	50
Lower Olympic	2C	3	6,600	6,055	545	1,480	1,577	37%	40%	162	5.49	5.85	16	90
Exhibition	2D	6	7,445	6,560	885	1,810	2,015	49%	61%	242	10.06	11.20	6	70
	2E	5	7,400	7,270	130	520	536	25%	25%	34	0.41	0.42	12	10
Canyon	2F	5	7,680	6,720	960	2,220	2,419	43%	50%	211	10.76	11.72	12	140
	2G	3	7,700	7,400	300	920	968	33%	35%	250	5.27	5.54	16	90
Total Lift 2	7						18,245					52.10		600
Lift 4 - Cold Springs														
Inhibition	4A	7	7,550	6,860	690	1,320	1,489	52%	65%	196	5.93	6.69	8	50
Cold Springs Cut-Off	4B	4	7,650	6,620	1,030	2,990	3,162	34%	42%	100	6.89	7.29	16	120
	4C	6	7,670	7,300	370	840	918	44%	63%	296	5.71	6.24	6	40
	4D	7	7,500	6,750	750	1,590	1,758	47%	66%	345	12.60	13.93	8	110
Lower Broadway	3F	3	7,380	6,620	760	3,320	3,406	23%	37%	95	7.22	7.41	16	120
	3G	7	7,440	6,880	560	770	952	73%	83%	625	11.05	13.66	8	110
Gun Tower Lane		3	7,670	7,390	280	4,420	4,429	6%	6%	25	2.54	2.54	16	40
Total Lift 4	7						16,115					57.76		590
Lift 6 - Sunnyside														
Lower College 2/3 area	5B	3	7,980	6,360	1,620	7,210	7,390	22%	38%	136	22.44	15.33	16	250
Mid River Run	5D	4	8,080	6,660	1,420	4,500	4,719	32%	41%	87	8.99	9.43	16	150
Sunnyside Bowl	5E	6	8,180	7,460	720	1,460	1,628	49%	56%	163	5.45	6.08	6	40
	5F	7	7,750	7,020	730	1,270	1,465	57%	65%	426	12.42	14.33	8	110
	5G	7	7,360	6,740	620	1,120	1,280	55%	67%	471	12.12	13.85	8	110
	5H	7	7,285	6,720	565	1,010	1,157	56%	67%	424	9.84	11.28	8	90
	5I	6	7,220	6,780	440	830	939	53%	60%	381	7.26	8.22	6	50
Holiday	5L	6	7,770	6,920	850	1,610	1,821	53%	57%	178	6.59	7.45	6	40
Total Lift 6	8						20,399					85.97		840
Lift 7 - Greyhawk														
Lower Warm Springs	7A	4	7,365	5,885	1,480	4,720	4,947	31%	43%	267	28.88	30.27	16	480
Race Arena	7B	6	6,820	5,890	930	2,690	2,846	35%	53%	158	9.76	10.33	6	60
Brick's Island	7C	6	6,950	6,410	540	1,200	1,316	45%	54%	190	5.23	5.74	6	30
Greyhawk	7D	6	7,365	5,890	1,475	4,110	4,367	36%	55%	253	23.87	25.36	6	150
Hemingway	7E	6	7,360	6,040	1,320	3,920	4,136	34%	54%	205	18.42	19.44	6	120
Cozy	7F	5	7,260	6,095	1,165	3,130	3,340	37%	52%	181	13.01	13.88	12	170
Total Lift 7	6						20,951					105.02		1,010

TABLE IV.14 CONT.
BALD MOUNTAIN
BAD WEATHER MODE
AVAILABLE SKI TRAILS

Trail Name	Trail No.	Skill Class	Elevation Top Feet	Elevation Bottom Feet	Total Vert. Feet	Horz. Dist. Feet	Slope Dist. Feet	Percent Slope Avg.	Percent Slope Steep	Ave. Width Feet	Horz. Area Acres	Slope Area Acres	Skiers At Area Density	Skiers At Area Total
Lift 8 - Frenchman's														
French Connection	8A	3	6,935	6,595	340	2,580	2,602	13%	14%	34	2.03	2.05	16	30
Aujus	8B	5	6,980	6,760	220	550	592	40%	50%	449	5.67	6.11	12	70
French Dip	8C	5	7,210	6,595	615	2,050	2,140	30%	50%	100	4.72	4.93	12	60
CanCan	8D	6	7,530	6,640	890	2,030	2,217	44%	53%	226	10.54	11.51	6	70
Graduate/Under Gra	8E	6	7,920	6,595	1,325	3,280	3,538	40%	56%	214	16.14	17.41	6	100
Janss	8F	6	7,680	6,785	895	2,060	2,246	43%	52%	204	9.65	10.52	6	60
Lower College l/3 area	5B	3	7,980	6,360	1,620	7,210	7,390	22%	38%	136	22.44	7.67	16	120
Upper Flying Squirrl/3 area	9B	6	8,170	7,680	490	1,730	1,798	28%	43%	213	8.47	2.93	6	20
Total Lift 8	6	(not including 5B,9B)					13,335	(not including 5B,9B)				63.13		530
Lift 9 - Flying Squirrel														
Upper Picabo's Street	9A	6	8,170	7,210	960	1,950	2,173	49%	59%	309	13.85	15.44	6	90
Upper Flying Squirrel	9B	4	8,170	7,680	490	1,730	1,798	28%	43%	213	8.47	5.87	16	90
Lower Flying Squirrel	9C	4	7,680	7,200	480	1,685	1,752	28%	42%	157	6.08	6.32	16	100
Arnold's Run	9D	6	7,250	7,040	210	350	408	60%	59%	156	1.25	1.46	6	10
Lower Picabo's Street	9E	4	7,210	6,555	655	1,905	2,014	34%	44%	273	11.94	6.32	16	100
Lower Picabo's Street	9E	6	7,210	6,555	655	1,905	2,014	34%	44%	273	11.94	6.32	6	40
Total Lift 9	6	(not including 9E class 6)					10,161	(not including 9E class 6)				41.72		430
Lift 13 - Kinderspielplatz														
	13A	1	5,760	5,750	10	150	150	7%	7%	120	0.41	0.41	40	20
Total Lift 13	1						150					0.41		20
Lift 16														
	16A	3	7,485	6,635	850	4,310	4,393	20%	28%	102	10.10	10.29	16	160
	16B	4	7,480	7,220	260	710	756	37%	44%	183	2.98	3.17	16	50
	16C	6	7,440	7,040	400	790	885	51%	57%	206	3.73	4.18	6	30
	16D	6	7,300	6,880	420	880	975	48%	56%	221	4.46	4.94	6	30
	16E	5	7,485	6,545	940	4,150	4,255	23%	50%	111	10.54	10.81	12	130
	16F	6	7,080	6,545	535	1,400	1,499	38%	53%	175	5.64	6.04	6	40
	16G	6	7,480	7,180	300	750	808	40%	53%	285	4.90	5.28	6	30
Total Lift 16	7						13,571					44.71		470
Total - Bald Mountain	49						22.0 miles					**461.1 Acres**		**4,700**

Table IV.15 and Plate IV.2 illustrate the distribution of the ski terrain by skill class when operating in bad weather mode. As shown, the advanced and expert skill classes have a surplus of terrain, while the all the other skill classes have a shortage of terrain except the low intermediate, which is quite well balanced.

TABLE IV.15
BALD MOUNTAIN
BAD WEATHER MODE
CUMULATIVE SKI TRAIL BALANCE

Skill Classification	Acres	Skiers	Balance	Ideal
1 Beginner	0.4	20	0.4%	5%
2 Novice	10.3	210	4.5%	10%
3 Low Intermediate	66.3	1,050	22.3%	20%
4 Intermediate	68.7	1,090	23.2%	30%
5 High Intermediate	47.9	580	12.3%	20%
6 Advanced	193.9	1,170	24.9%	10%
7 Expert	73.7	580	12.3%	5%
TOTALS	**461.1**	**4,700**	**100%**	**100%**

Average Density =	11.6	Skiers/Acre
Optimum Density =	12.2	Skiers/Acre
Weighted Demand	15,594	VTF/Skier/Day

SKI TRAIL BALANCE
BAD WEATHER MODE

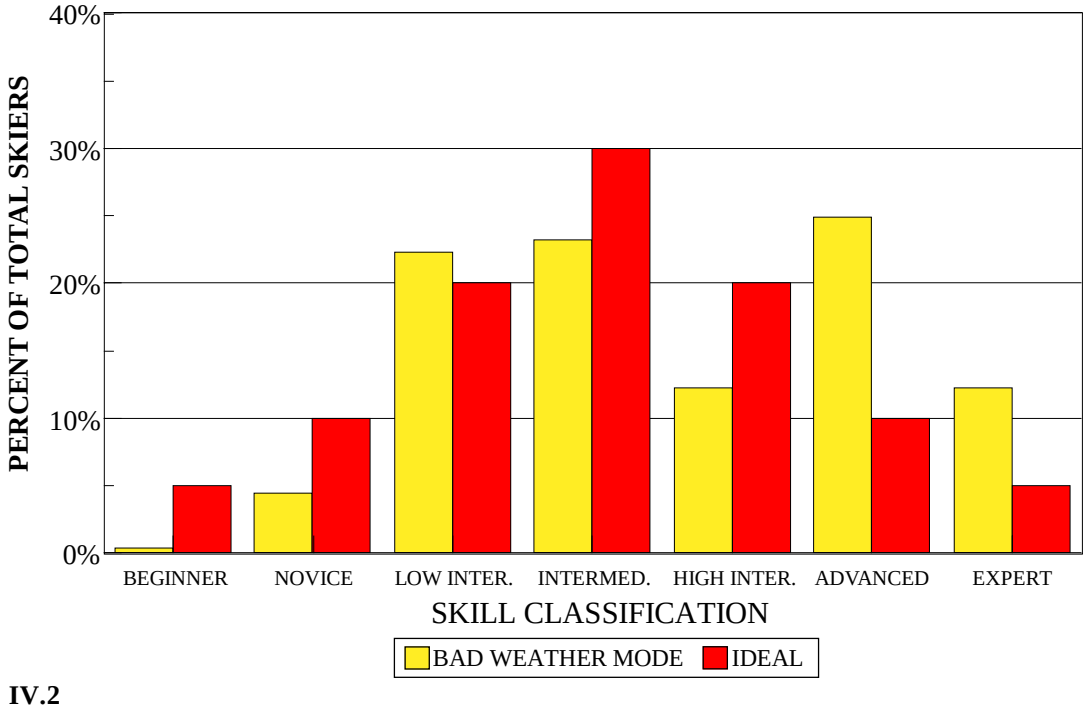


PLATE IV.2

.13 Summer Activities

Summer activities are extremely important to the success of the resort recreational facility. These activities can make use of the infrastructure and facilities already in place for winter recreation. Sun Valley, Ketchum and the Big Wood River Valley currently have quite heavy summer use in the valley. These activities include mountain biking, fishing, whitewater sports, horseback and wagon rides, tennis, swimming and aquatic activities, festivals and shows and conferences and retreats. In the future, the diversity of the summer use will increase and expand to include other activities. The following is a list which describes anticipated on-mountain summer activities for Sun Valley.

- Lift accessed sightseeing and hiking
- Mountain top dining
- Mountain biking
- Night time stargazing
- USFS Nature Interpretive Hikes

It is anticipated that the River Run Gondola can be utilized to transport foot-passengers up the mountain to the Roundhouse area for sightseeing and dining during the day and in the evening, during both the winter and summer seasons. During the summer, foot-passengers could venture out from the Roundhouse location to hike around the different parts of Bald Mountain. From the Roundhouse location, foot-passengers could also continue up the mountain on the Christmas detachable chairlift to the Lookout Restaurant for hiking or sightseeing. If the Challenger chair is installed with the summer gondola option, it would also be possible for foot-passengers to access the top of the mountain from the Warm Springs base for both sightseeing and hiking. The hiking program could be expanded to include nature interpretive hikes with USFS staff assisting in the interpretive hikes similar to the program that is currently undertaken during the winter by the Snow Rangers. Indoor and outdoor interpretive displays could also be installed in and around the lodge facilities.

Several evenings per season could be centered around stargazing, with telescopes and informative displays available at the mountain restaurants. Special events can also be planned for observation of astronomical displays such as the Perseid meteor showers, etc.

The mountain restaurants will also be used for conferences, seminars and group dinners associated with these gatherings. For example, the opportunity to meet and have a meal in a unique setting for one day of a multi-day conference will provide a unique attraction for groups coming to Sun Valley/Ketchum.

The proposed mountain biking and summer hiking will utilize the existing trails and mountain roads, as illustrated in Figure 19c. No new hiking trails or mountain biking trails are proposed in this Master Plan.

.14 Infrastructure

The majority of infrastructure required to implement the proposed Master Plan improvements is already in place on Bald Mountain.

Communications

As is the case with the electrical system on Bald Mountain, the majority of the communication system is already in place. This communication system is comprised of a combination of both phone lines and fibre optic lines that are either buried or suspended from lift towers. There is also a communication line for ski racing located on the Warm Springs side of the mountain. The existing and proposed communication network is illustrated on Figure 19a.

Lift 16 will require a communication line from the snowmaking pumphouse to its top terminal. This line will more than likely be buried in the same trench as the electrical supply line to this lift.

Electrical Power

Electrical power to all of the restaurant locations and skier service buildings is already in place. Existing electrical power is already in place for all of the proposed lifts except Lift 16. Lift 16 will require approximately 550 feet of primary electrical

feed stretching from the mid-mountain snowmaking pumphouse located below the Roundhouse to the top terminal of the lift. New electrical conductors between the power transformers/switch gear station and the lift drive station may also be required. The existing and proposed electrical power distribution system is illustrated on Figure 19b.

Roads

There is an extensive mountain road system on Bald Mountain. This road system provides access to all major lift terminals and on-mountain buildings. Many of these roads are also used as skiways during winter operations.

New roads proposed include a road from the bottom of the proposed Lift 17 in Turkey Bowl, to the bottom of Seattle Ridge Lift in Phase 2. This road is effectively a 4,600-foot extension of the fire road from the 7,640-foot elevation to the 8,220-foot elevation at the bottom of Turkey Bowl. This road would be used during the construction of the lift, as well as on-going maintenance of the bottom station of the lift. During the winter, this road will be used as skiway for beginner skiers to access lower Broadway and the Cold Springs lift (Lift 4R) to download on the River Run Gondola (Lift 2R). Additionally, this skiway can be used to evacuate skiers from the Turkey Bowl zone should the lift experience mechanical difficulties.

In Phase 3, a 500-foot section of road is proposed to access the top terminal of Lift 16. The existing and proposed roads are illustrated on Figure 19c.

Potable Water

The existing potable water infrastructure on the mountain is adequate for the proposed improvements outlined in the Master Plan. The existing potable water system consists of a pumping system which pumps water from the Warm Springs side of the mountain up to water reservoirs which supply the Lookout, Roundhouse and Seattle Ridge restaurants. Water for the daylodges located at Warm Springs and River Run are supplied by the city's system. No new potable water systems are proposed for this Master Plan.

Sewage

The existing sewage infrastructure on the mountain is adequate for the proposed improvements outlined in the Master Plan. The existing sewage system consists of a bubble plant and leech field at Seattle Ridge, and leech fields for both the Outlook and Roundhouse restaurants. Sewage disposal for the daylodges located at Warm Springs and River Run are supplied by the city's system. No new sewage disposal systems are proposed for this Master Plan. The water and sewer infrastructure is illustrated in Figure 19d.